

CURRICULUM VITAE

Larry Fredrick Lemanski

CURRENT POSITIONS

Vice President for Research and Graduate Studies
Dean of Graduate Programs
President and Chairman of the Board of the Florida Atlantic University Research Corporation
Professor of Biomedical Science
Professor of Biology
Professor of Chemistry
Florida Atlantic University

BUSINESS ADDRESS

Vice President for Research and Graduate Studies
Florida Atlantic University
777 Glades Road
Boca Raton, Florida 33431

HOME ADDRESS

[REDACTED]

EDUCATION

| INSTITUTION AND LOCATION | DEGREE | YEAR |
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| University of Wisconsin, Platteville, WI | B.S., Biology (with Honors) | 1962-1966 |
| Arizona State University, Tempe, AZ | M.S., Zoology | 1966-1968 |
| Arizona State University, Tempe, AZ | Ph.D., Zoology | 1968-1971 |
| University of Pennsylvania, Philadelphia, PA | Postdoctoral, Cell Biology | 1971-1975 |

FELLOWSHIPS

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| 1966-1968 | Teaching Fellowship - Arizona State University. |
| 1968-1971 | NIH Predoctoral Fellowship, Arizona State University. Dr. E.M. Bertke (Sponsor). |
| 1971-1973 | NIH Postdoctoral Fellowship, University of Pennsylvania. Dr. Lee D. Peachey (Sponsor). |
| 1973-1975 | Muscular Dystrophy Association Postdoctoral Fellowship, University of Pennsylvania. Dr. Lee D. Peachey (Sponsor). |
| 1976-1977 | American Heart Association Established Investigator Award, University of California, San Francisco. |
| 1977-1981 | American Heart Association Established Investigator Award, University of Wisconsin, Madison. |

ACADEMIC POSITIONS

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| 1971 | Assistant Professor (Guest) Zoology - Arizona State University, Tempe. |
| 1973-1975 | Research Associate, Muscle Biology Institute - University of Pennsylvania, Philadelphia. |
| 1975-1977 | Assistant Professor of Anatomy - University of California Medical Center, San Francisco. |
| 1977-1979 | Assistant Professor of Anatomy - University of Wisconsin, Madison. |
| 1977-1979 | Affiliate Assistant Professor of Animal Biology, College of Agriculture, University of Wisconsin, Madison. |

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| 1979-1981 | Associate Professor of Anatomy (tenure), College of Medicine, University of Wisconsin, Madison. |
| 1979-1981 | Affiliate Associate Professor of Animal Biology, College of Agriculture, University of Wisconsin, Madison. |
| 1981-1983 | Professor of Anatomy (tenure), College of Medicine, University of Wisconsin, Madison. |
| 1981-1983 | Affiliate Professor of Animal Biology, College of Agriculture - University of Wisconsin, Madison. |
| 1983-1997 | Professor and Chairman (tenure), Department of Anatomy and Cell Biology - State University of New York Health Science Center, Syracuse, New York. |
| 1987-1990 | Director, Cell and Molecular Biology Program - State University of New York Health Science Center, Syracuse, New York. |
| 1987-1997 | Research Professor, Department of Biology - Syracuse University, Syracuse, New York. |
| 1994-1997 | Lecturer, Program in Medical Humanities - State University of New York Health Science Center, Syracuse, New York. |
| 1997-2001 | Professor (tenure), Department of Medical Physiology, College of Medicine, Texas A&M Medical Center, College Station, Texas. |
| 1997-2001 | Professor, Department of Biology, College of Science, Texas A&M University, College Station, Texas. |
| 1997-2001 | Associate Vice President for Research, Office of Research and Graduate Studies, Texas A&M University, College Station, Texas. |
| 2001-2002 | Vice President for Research, Florida Atlantic University, Boca Raton, Florida. |
| 2002-present | Vice President for Research and Graduate Studies, Florida Atlantic University, Boca Raton, Florida. |
| 2003-present | Dean of Graduate Programs, Florida Atlantic University, Boca Raton, Florida. |
| 2001-present | President and CEO of the Florida Atlantic University Research Corporation, Florida Atlantic University, Boca Raton, Florida. |
| 2001-present | Professor (tenure), Department of Biomedical Science, Florida Atlantic University, Boca Raton, Florida. |
| 2001-present | Professor, Department of Biology, Florida Atlantic University, Boca Raton, Florida. |
| 2002-present | Professor, Department of Chemistry, Florida Atlantic University, Boca Raton, Florida. |
| 2004-present | Volunteer Professor, Department of Cell Biology and Anatomy, College of Medicine, University of Miami |

PROFESSIONAL HONORS, AWARDS AND PRIZES

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| 1966 | Honor Graduate of University of Wisconsin. |
| 1966 | Named in "Who's Who Among Students in American Universities and Colleges". |
| 1969 | Arizona Academy of Science Research Award. |
| 1970 | Electron Microscopy Society of America Presidential Scholarship (for outstanding paper presented by a graduate student). |
| 1971-present | Society for the Sigma Xi. |
| 1978 | Louis N. Katz Basic Science Research Prize - an award of the American Heart Association "to an individual who, through basic research, has made the most significant original contribution pertinent to cardiovascular phenomena". |
| 1976-1981 | Established Investigatorship Award from the American Heart Association. |
| 1982 | Outstanding Researcher Award, American Heart Association of Wisconsin. |
| 1982-1990 | Distinguished International Science Examiner, Bhopal University, India. |
| 1987 | Presidential Outstanding Research Award, State University of New York, Syracuse. |
| 1988-present | Named in Marquis "Who's Who in America". |
| 1990-present | Named in Marquis "Who's Who in the World". |
| 1990 | Distinguished Alumnus Award, University of Wisconsin. |
| 1990 | United University Professions/New York State Excellence Award. |

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| 1995 | President's Award for the Advancement of Affirmative Action - "for having excelled in the attainment of Affirmative Action Goals, the promotion of diversity, and development of innovative approaches and programs to recruit and retain members of underrepresented groups and maintain a multicultural environment", State University of New York. |
| 1997-present | American Men and Women of Science. |
| 1997 | Outstanding Researcher Award, Department of Anatomy and Cell Biology, State University of New York. |
| 1999-present | Swarthmore's Who's Who in America. |
| 2000-present | International Who's Who of Professionals. |
| 2000-present | Phi Beta Delta—Honor Society for International Scholars. |
| 2001-present | Fellow, American Association for the Advancement of Science. |
| 2002-present | Who's Who in the 21 st Century. |
| 2003-present | The Honor Society of Phi Kappa Phi. |
| 2003-present | Mathew Romer Foundation Honoree. |
| 2004-present | Empire Who's Who Registry of Executives and Professionals |

PROFESSIONAL SOCIETIES

Beta Beta Beta Biological Sciences Honor Society
Society for the Sigma Xi Honor Society
The Histochemical Society
Society for Developmental Biology
American Society of Zoologists
American Association for the Advancement of Science
American Society for Cell Biology
Electron Microscopy Society of America
American Heart Association
International Society for Heart Research
Experimental Biology and Medicine
American Association of Anatomists (Appointed to the Nominations Committee 1998-2002) (elected to National Public Affairs Committee 2001-2004)
New York Academy of Sciences
Association of Anatomy, Cell Biology, and Neurobiology Chairs (elected to National Council 1997-2001)

BOARDS OF DIRECTORS

Texas Biomedical Research Institute (1997-2001)
Oak Ridge Associated Universities (Elected to the National Board of Directors 2000-2003)
Florida Atlantic University Research Corporation (President and Chairman of the Board 2001-present)
Florida Atlantic Development Authority, Inc. (Board of Directors 2001-present)
University Alliance for Research, Education and Technology (Board of Directors, 2002-present)
Florida Research Consortium (Board of Directors 2001-present)
Florida Research Consortium (Executive Committee 2002-present)
Internet Coast (Board of Directors 2003-present)
Mathew Forbes Romer Foundation for Rare Genetic Diseases (Board of Directors, 2003-present)
Institute for Human and Machine Cognition (Board of Directors, 2003-2006, Governor Bush Appointee)
Florida NASA Space Institute (Board of Directors, 2004-2005; State University of Florida System Appointee)

ADMINISTRATIVE EXPERIENCE

1983-1997 Chairperson and Professor, Department of Anatomy and Cell Biology, State University of New York Health Science Center at Syracuse.

Accomplishments as Chairperson:

- Departmental extramural funding increased more than 9 fold in the last ten years I chaired the department (1987-1997)
- All faculty I appointed succeeded in obtaining substantial federal extramural grant support.
- The graduate student program increased from 5 students in 1983 to 25 students in 1997; most of the students were funded through a variety of internal and extramural funds.
- Overall, the Department of Anatomy and Cell Biology grew in number (faculty, technicians, secretaries, students, postdoctorals and support staff) from 37 members in 1983 to 88 members in 1997.
- National Board scores in Anatomy at the SUNY Health Science Center (HSC) rose progressively from well below the national average in 1983 to well above the national average in 1997.
- The Department of Anatomy and Cell Biology won the Distinguished Teaching Award for the last nine years in a row (1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997) that I chaired the department. Prior to my assuming the Chair, the department had never won the award, which was initiated more than 30 years ago. In fact, the year I began as Chair (1983), the department was rated as the worst basic science department on campus in teaching based upon student evaluations and national board scores; when I left it was ranked number 1 in the university on student evaluations and on National Board scores.
- Sponsorship of departmental faculty/staff promotions and awards:
 - eighteen faculty promotions to the Associate and Full Professorial Ranks
 - six faculty received the New York State/United University Professions Award
 - ten faculty received Presidential Awards for Teaching Excellence
 - two faculty members promoted to "Distinguished Professor of the SUNY System"
 - four faculty members received the Statewide Chancellor's Award for Excellence in Teaching
 - two faculty members appointed Director of the Cell and Molecular Biology Program (SUNY Health Science Center, Syracuse)
 - three faculty members appointed Director of the Neuroscience Training Program (SUNY Health Science Center, Syracuse)
 - three faculty members received NIH Research Career Development Awards
 - one faculty member received an AHA Established Investigatorship Award
 - one Postdoctoral Fellow (from my laboratory) received the Alpha Omega Alpha Outstanding Research Award
 - six departmental graduate students (one from my laboratory) received the Alpha Omega Alpha Graduate/Medical Student Research Award
 - four staff members honored with "Employee of the Month Award"
 - eight graduate students awarded summer fellowships to attend a Woods Hole Oceanographic Institute course
 - one faculty member appointed a Director of the M.D./Ph.D. Program
 - three faculty members (I recruited as Assistant Professors) have become Chairs of major medical school departments
 - one faculty member has become Research Director of a major research institute at a leading Canadian university (McGill)
- Initiated on campus and served as Program Director for NIH supported interdepartmental multi-user equipment grant to purchase new freeze fracture system for department (1990).
- Department cited as the "Best" basic science department and one of three "outstanding" departments (out of 24) by the LCME Site Visit Accreditation Team in 1990.
- Initiated and served as Principal Investigator on a request to purchase a Laser confocal scanning microscope system for the medical center from a New York State supported multi-user interdepartmental grant (1993).
 - Initiated on campus and served as Program Director for American Heart Association Campus Wide Medical Student Fellowship Training Grant Program (for support of four medical students per year to do full-time research, 1987-1996). Seven of the twenty-two individuals recruited into this program ended up getting combined M.D./Ph.D. degrees.

1987-1990 Director, Cell and Molecular Biology Program, State University of New York, Health Science Center at Syracuse.

Accomplishments as Director:

I initiated the Cell and Molecular Biology Program and secured its funding (1,500,000) from the Graduate Initiative Program from SUNY Central (in Albany). The Dean of the Graduate School subsequently appointed me as the CMB Program's first director (to be rotated at three-year intervals). It began as a collection of 23 Cell and Molecular Biologists, which I appointed, representing eight different basic science and clinical departments on campus. It had grown to more than 40 faculty by the time I left Syracuse in 1997. The program continues to flourish and form the basis for the Cell and Molecular Biology Graduate and Postdoctoral Training on campus.

1997-2001; 2001 Associate Vice President for Research, Texas A&M University; Acting Vice President for Research, Texas A&M University.

As the Associate Vice President at Texas A&M, I was "second in command" of the Office of The Vice President for Research and Associate Provost for Graduate Education and was in charge of the Office when the Associate Provost/Vice President was away. In this capacity, I had significant responsibilities in the overall operation of the research enterprise as well as graduate education at Texas A&M University. The Texas A&M campus in College Station has 9 Colleges plus a Medical School as part of the System Health Science Center as well as several major interdisciplinary research and training programs, forming a very broad and comprehensive university. There were about 2,500 faculty and 45,000 students, including approximately 8,000 graduate and professional students. In FY2000, over \$400,000,000 was spent on research activities at Texas A&M (number 10 in the nation); in one way or another, my office was responsible for the administration of this research. Specific duties and accomplishments as Associate Vice President for Research (1997-2001) and Acting Vice President for Research (2001):

- Responsible for the Office of Sponsored Projects including administration of grants, contracts, intellectual property and related activities.
- Supervised the University Veterinarian and had responsibility for the Laboratory Animal Resources and Research Facilities on campus.
- Administered and chaired the peer review panels for four faculty enhancement grant programs at Texas A&M: 1) Scholarly and Creative; 2) Energy Resources (state of Texas); 3) Interdisciplinary and 4) Faculty mini-grant program.
- Arranged and made commitments for university matching funds for major grants submitted by faculty (e.g., NSF-Science and Technology grants, NIH equipment grants or National Endowment for the Humanities, National Education Association, etc.).
- Initiated on campus, electronic research administration for our internal grants programs and reviewed ways to get our campus on line for the upcoming electronic grant submission requirements of various private and government agencies (NIH, NSF, NASA, AHA, etc.).
- Took a lead state-wide in Texas in setting up the TRUF (Texas Research University Forum) which involved organizing the research administrators and faculty of the University of Texas, Texas A&M, University of Houston and Texas Tech University. A major purpose of the organization was to determine "common" concerns and goals of these four major state-supported research universities and to articulate these goals to the Texas legislature through our University Administrators.
- For admission to AAU (American Association of Universities), I wrote a synopsis of the history and accomplishments of Texas A&M University. The document was entitled: "Texas A&M: A Prospectus". I was told that this document was a major factor in Texas A&M gaining admission into the American Association of Universities (AAU). I also served to keep an updated record of significant accomplishments of the faculty, staff, students and university.

- Put together a major university-wide survey concerning the effectiveness of our faculty enhancement grant programs with respect to faculty productivity as well as the leveraging of funds from extramural sources.
- Initiated a major effort to significantly increase funding for faculty/student research in all areas. For example, areas which were particularly neglected in the past at Texas A&M were the scholarly and creative activities. These activities were underfunded and I worked very hard to increase funding to enhance the opportunities for liberal arts faculty to pursue scholarly and creative works (finish writing books in progress, do archival research, perform in and direct plays, etc.).
- Served on the Texas A&M President's "Vision 2020 Task Force". This was a university-wide committee to develop a plan to make Texas A&M University a "top 10" university overall by the year 2020. I served as the "facilitator" for the subgroup on graduate education.
- Appointed membership on and had responsibility for several of the research compliance committees at Texas A&M. These included: Institutional Review Board for Human Subjects (IRB) University Laboratory Animal Care Committee (ULACC), and the University Committee on Hazardous Biomaterials (UCHB).
- Involved in developing and applying the Rules and Standard Administrative Procedures (SAPS) when dealing with issues of academic misconduct (fraud, plagiarism, etc.).
- Responsible for overseeing and resolving cases of academic misconduct, plagiarism, fraud, etc. working with research standards officers as assigned by the Provost or Vice President for Research.
- Gave instruction to faculty, staff and graduate students on ethics, academic/research standards and misconduct as part of the new faculty and new graduate student orientations.
- Hosted various national and international delegations of visitors to campus. Usually gave a welcoming speech and overview of research activities at Texas A&M as well as host lunches or dinners.
- Involved in conducting and hosting external reviews of various interdisciplinary graduate programs on campus.
- Administrative Member, The University Research Infrastructure Committee. This committee analyzed and made recommendations to the University Provost and President concerning which areas of research should be funded.
- National Sub-Committee on Electronic Research Information for the Federal Demonstration Partnership, National Academy of Sciences.
- Texas A&M University Councilor to the Oak Ridge Associated Universities Council.
- Science and Technology Partnership Committee of Oak Ridge Associated Universities.
- Served as the Texas A&M University representative for the Government, Industry and University Research Roundtable (GUIRR), Washington, DC.
- Texas A&M University representative to the Texas Society for Biomedical Research.
- Board of Directors, Texas Society for Biomedical Research.
- Board of Directors, Oak Ridge Associated Universities (a consortium of 87 national universities headquartered in Oak Ridge, Tennessee), elected to 3-year term, 2000-2003.
- Frequently represented Texas A&M University on the Board of Directors of the Houston Area Research Corporation (HARC).
- Chaired the University Advisory Committee that oversees the Texas A&M University Electron Microscopy and Imaging Center and Chaired the Hiring Committee and recruited the Director.
- Instrumental in organizing "The Michael DeBakey Comparative Cardiovascular Science and Biomedical Devices Institute" at Texas A&M University in College Station, Texas.

- Coordinated the organization of a new “Microencapsulation and Drug Delivery Center” by putting together components of NASA, Texas A&M and Private Industry into a cooperative new Research Center on campus to conduct basic research as well as have commercially significant applications.
- Helped to coordinate an effort to set up a new computer artificial intelligence research center involving reasoning and creative activities.
- Served as the Texas A&M Representative on the Bryan/College Station Chamber of Commerce to plan for “Exposition 2000”.
- Traveled to China to help set up an exchange program with Nanjing Medical University and the Shanghai Institute.

2001-present

Vice President for Research and Graduate Studies, Florida Atlantic University, Boca Raton, Florida
 President of the Florida Atlantic University Research Corporation,
 Dean of Graduate Programs, Florida Atlantic University, Boca Raton, Florida
 Professor of Biomedical Science (Tenure)
 Professor of Biology
 Professor of Chemistry

- ◆ Oversee all aspects of research and graduate studies at Florida Atlantic University's seven campuses (26,000+ students).
- ◆ Oversee offices of the Vice President for Research, Grants and Contracts, Sponsored Research, Technology Transfer, Graduate Studies, Graduate Recruitment and Admissions and the FAU Research Corporation.
- ◆ Oversee the 42 Research Centers at FAU.
- ◆ Oversee the development of projects for earmark or other special federal funding consideration. This includes frequent trips to Washington, D.C. to meet with U.S. Senators, Representatives and their staff members to discuss funding and other issues related to FAU.
- ◆ Serve on the Florida Atlantic University President's Executive Committee where I participate in decision-making at the highest university administrative level.
- ◆ Oversee and negotiate research memoranda of understanding among FAU and other universities, governmental and private agencies and industry.
- ◆ Represent Florida Atlantic University at the University Alliance for Research, Education and Technology on the Education Committee.
- ◆ Represent Florida Atlantic University at the University Alliance for Research, Education and Technology on the Board of Directors.
- ◆ Represent Florida Atlantic University as a Councilor of the Oak Ridge Associated Universities, Inc.
- ◆ Represent Florida Atlantic University as a National Board of Director's member for the Oak Ridge Associated Universities (elected to National Board of Directors in 2003).
- ◆ Oversee and promote faculty collaborations in creating interdisciplinary research project application for state, federal and private funding
- ◆ Represent Florida Atlantic University as a Board of Directors Member, Enterprise Development Corporation of South Florida.
- ◆ Established and initially chaired the Intellectual Property Committee for Florida Atlantic University.
- ◆ Chaired the Search Committee for the Dean of Science.

- ◆ Make final decisions on patents that the University will support through the Technology Transfer Office.
- ◆ Create "spin-off" companies through the Florida Atlantic University Research Corporation, Inc. to commercialize faculty members' discoveries and patents.
- ◆ Serve on the Board of Directors for the Florida Research and Development Authority Research Park to promote synergistic interactions between research park tenants and Florida Atlantic University.
- ◆ Promote, negotiate and facilitate interuniversity, government and industrial partnerships in research endeavors (e.g., coordinated a cooperative venture among Florida Atlantic University, Harbor Branch Oceanographic Institute (Private) and the Smithsonian Institution (Federal) to obtain \$10 million in State funding; have promoted several other similar partnerships. This \$10 million initiative was funded in December, 2003).
- ◆ Have given numerous speeches to numerous local groups (University Club, Rotary Club, Zonta Club, American Heart Association, Faculty Club, etc.) as well as visitors to the FAU Campus and Research Park about scholarly activities at FAU.
- ◆ Traveled to Japan to set up international research collaborations and exchange programs for faculty and students (2003).
- ◆ Coordinated Centers of Excellence applications for the State of Florida Research Commission.
- ◆ Executive Committee Member, Board of Directors for Governor Jeb Bush's State of Florida Research Consortium (2002-present).
- ◆ Have established faculty enhancement programs to fund various research initiatives and to stimulate research activities at FAU (2003).
- ◆ Funding has gone up more than 23% during the last FY, more than doubling the previous growth rate of funding over the last decade at FAU (2003).
- ◆ Two new Ph.D. programs I promoted have been approved (Integrative Biology and Educational Counseling) by the Florida Board of Education, Tallahassee (2003).
- ◆ Several new master's degree programs under my watch as Graduate Dean were approved (2003).
- ◆ Dissertation Grant Program established for graduate students (2003).
- ◆ Increased funding for tuition waivers and stipends across several Colleges at FAU.
- ◆ Served as Administrative Head and Principal Investigator of \$10,000,000 State of Florida Center of Excellence Grant (only 3 awarded in state out of 16 applications).
- ◆ Responsible for creating a graduate faculty at FAU.
- ◆ Created a new position at FAU for an Associate Vice President for Research and Dean of Graduate Studies (has since been split into two positions).
- ◆ Worked closely with Governor Bush's Economic Development Group and President Brogan of FAU to help bring Scripps Research Institute to Palm Beach County where the new Scripps Research Facility will have major affiliations with FAU beginning in the summer of 2004 (joint faculty appointments, joint grants, FAU graduate students and postdoctoral fellows, etc.).
- ◆ Responsible for FAU affiliations with the University of Florida and Nova Southeastern University to bring a major United States Geological Survey (USGS) Research Center to South Florida. It is anticipated that the new center will have a new research/education facility in Davie and will have about 130 USGS scientists (jointly-appointed) housed there for collaborative interactions with our students, faculty and staff.
- ◆ Serve as Governor Bush's appointee to the Board of Directors for the Institute for Human and Machine Cognition (IHMC).

- ◆ Oversaw initial negotiation trip for State of Florida and FAU faculty/staff to visit Scripps in San Diego to set up collaborations with Scripps for the new Scripps Institute in Florida.
- ◆ Worked with local and national lobbyists and Congress to help bring significant earmark funding to FAU. Over 10,000,000 was awarded in 2004 (up from less than \$1 M in the previous year when this was responsibility of the FAU Foundation).

COMMITTEE ASSIGNMENTS

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| 1975-1977 | University of California, San Francisco Student Welfare Committee (Member) Academic Senate (Member) |
| 1977-1983 | University of Wisconsin Executive Committee (Member) Space Committee (Member) Seminar Committee (Chairperson) Medical Student Orientation Facilitator (Chairperson) Chairman's Ad Hoc Committee (Member) - to re-evaluate departmental mission Graduate Admissions Committee (Member) Teaching Assistantship Committee (Member) Pathology and Laboratory Medicine Departmental Chairperson Search Committee (Member) Research Committee (Chairperson) Medical School Faculty Awards Committee (Member) Medical School Student Awards Committee (Member) |
| 1983-1996 | State University of New York, Health Science Center University Space Utilization Committee (Chair) Institutional Review Board for Protection of Human Subjects (Member) First Year Grades Committee (Member, Chairperson) Student Academic Promotions Committee (Member) Task Force for Curriculum Revision (Member) Pediatric Chairman Search Committee (Member) Pharmacology Chairman Search Committee (Chairperson) Finance and Facilities Committee (Member) Presidents Executive Council (Member) Presidential Inauguration Committee (Member) Teaching and Research Program Planning Committee (Chairperson) Urology Chairperson Search Committee (Member) Cell and Molecular Biology Director Search Committee (Chairperson) Neuroscience Program Director Search Committee (Member) Presidents Long-Range Planning-Steering Committee (Member) College of Medicine Executive Committee (Member) Tenure and Promotions Committee (Member) Graduate Council (Member) Medical Student Applicant Interview Committee (Member) Family Medicine Chairperson Search Committee (Member) SUNY Distinguished Professorship Selection Committee (Member) Physiology Steering Committee and Chair Search Committee (Chairperson) Obstetrics and Gynecology Chair Search Committee (Member) |
| 1997-2001 | Texas A&M University Interdisciplinary Planning and Oversight Committee (Ex Officio Member) Research Infrastructure Committee (Ex Officio Member) Committee to Ensure and Project the Quality of Texas A&M University (Chair) |

College of Medicine Task Force to Examine Research Issues Special Relationship with Texas A&I University (Member)
 Vision 2020 Committee, Graduate Studies Working Theme Group (Facilitator)
 Search Committee for Associate Dean for Research, College of Veterinary Medicine (Member)
 University Electron Microscopy and Imaging Center Advisory Committee (Chair)
 Program Review Committee to Evaluate the Race and Ethnic Studies Institute at Texas A&M (Chair)
 Scholarly and Creative Faculty Enhancement Program (Chair)
 Energy Resources Research Committee, State of Texas (Chair)
 Interdisciplinary Research Committee Enhancement Program (Chair)
 Texas Research University Forum (TRUF) (Member, Coordinator)

2001-present Florida Atlantic University
 Search Committee for the Dean of Science (Chair)
 Special Committee to evaluate possible misconduct (Chair)
 President's Executive Committee (Member)
 President's Cabinet (Member)
 Intellectual Property Committee (Chair)
 President's Commission on Diversity (Member)
 Silver Jubilee (Member)
 Advisory Group for the FAU Athletic Director Search (Member)
 Search Committee for the Provost
 Co-Chair (with Provost) of Subcommittee on Research for Strategic Plan
 Chair, American Heart Association Walk-a-thon for FAU

FUNDRAISING/FUND GETTING

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| ♦ Dr. Camillo Benzo Memorial Fund | \$28,000 |
| ♦ Involved with American Heart Association Walkathon | \$7,800 |
| ♦ SUNY Graduate Research Initiative | \$1,200,000 |
| ♦ Coordinated and serve as PI on Florida Center of Excellence in Medical and Marine Biotechnology | \$10,000,000 |
| ♦ Coordinator of Earmark and related government agency funding during last three years | \$30,000,000 |

TRAINING GRANT/PROGRAM MEMBERSHIP

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| 1979-1983 | Developmental Biology NIH Training Grant Faculty, University of Wisconsin. |
| 1981-1983 | Cellular and Molecular Biology NIH Training Grant Faculty, University of Wisconsin. |
| 1987-1990 | Director, Cell and Molecular Biology Training Program, State University of New York Health Science Center at Syracuse. |
| 1987-1996 | Program Director, American Heart Association Medical Student Research Fellowship Program, State University of New York Health Science Center at Syracuse. |
| 1990-1996 | Executive Committee, Cell and Molecular Training Program, State University of New York Health Science Center at Syracuse. |
| 2000 | Cardiovascular Biology Training Grant application, College of Medicine, The Texas A&M System Health Science Center, College Station. |

PROFESSIONAL SERVICE

1980-present Manuscript referee for the following journals:
 Asian Journal of Science (American editor)
 CRC Press, Inc., Book Proposal Reviews
 Developmental Biology
 Science
 International Scanning Electron Microscopy Symposium

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| | Canadian Journal of Experimental Zoology |
| | Tissue and Cell |
| | Journal of Cell Biology |
| | Scanning Electron Microscopy |
| | Experimental Cell Research |
| | Anatomical Record |
| | American Journal of Anatomy |
| | Journal of Morphology |
| | Acta Anatomica |
| | Proceedings of the National Academy of Science |
| 1980-present | Grant referee for the following organizations: National Foundation March of Dimes National Science Foundation Bay Area Heart Association, San Francisco, California National Institutes of Health American Heart Association of Wisconsin National Veteran's Administration Regular Substantive Reviewer: Member of the National Committee to Review Applications for the Career Development Award Program, National Veteran's Administration, Washington, D.C. |
| 1981 | National Symposium Organizing Committee, Electron Microscopy Society of America. |
| 1981 | Program Committee, Electron Microscopy Society of America. |
| 1983 | Research Committee, American Heart Association of Wisconsin. |
| 1983-present | American Editor, Asian Journal of Experimental Sciences. |
| 1984-present | NIH Scientific Review Groups, Cardiovascular Diseases (ad hoc) and several special Study Sections for RFAs (ad hoc). |
| 1992-1997 | Member, American Society for Cell Biology United States Congressional Liaison Committee for Scientific Research. |
| 1993-1997 | Member, Cardiovascular A Study Section, National Institutes of Health, Bethesda, Maryland. |
| 1994-1995 | Vice President, The Society of the Sigma Xi, Scientific Research Society, Syracuse Chapter. |
| 1995-1996 | President, The Society of the Sigma Xi, Scientific Research Society, Syracuse Chapter. |
| 1995-1996 | Coordinator, 25th Congressional District, American Society for Cell Biology United States Congressional Liaison Committee for Scientific Research. |
| 1995-1997 | Member, American Heart Association Peer Review Panel, New York State Affiliate. |
| 1995-1997 | Member, Research Committee, American Heart Association, New York State Affiliate. |
| 1995-1997 | Member, National Curriculum Committee, American Association of Anatomy, Cell Biology and Neurobiology Chairpersons. |
| 1997 | Northeastern Region Delegate, National Meeting, Society for the Sigma Xi. |
| 1997 | Teller, National Meeting, Society for the Sigma Xi, New Orleans. |
| 1997 | Chairperson, Special Study Section, National Institutes of Health. |
| 1997-2001 | Executive Council, Association of Anatomy, Cell Biology and Neurobiology Chairpersons. |
| 1998 | NIH Mock Study Section Panel, FASEB Meeting, San Francisco, California. |
| 1998 | Government, University, Industry Research Roundtable (Texas A&M University substitute representative). |
| 1998-2001 | Texas Society for Biomedical Research (Board of Directors). |
| 1998-present | Oak Ridge Associated Universities Councilor. |
| 1999 | Member, Technical Review Panel, Cancer and Smoking Disease Research Program, State of Nebraska, Lincoln. |
| 1999-present | Member, Review Panel, Arizona Disease Control Research Commission, Phoenix, AZ. |
| 2000-present | Oak Ridge Associated Universities (National Board of Directors). |
| 2001-present | National Public Affairs Committee, American Association of Anatomists. |
| 2001-present | Enterprise Development Corporation of South Florida (Board of Directors). |

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| 2002-present | University Alliance for Research, Education and Technology (National Board of Directors). |
| 2003-present | Internet Coast, Inc. (Board of Director). |
| 2003-present | American Heart Association (Florida/Puerto Rico Affiliate) Peer Review Committee. |
| 2003-present | American Heart Association (Florida/Puerto Rico Affiliate) Research Committee. |
| 2003 | American Heart Association Annual Gala Committee (Boca Raton) |
| 2004 | Chair, American Heart Association Walk-a-thon for FAU |

MILITARY, SOCIAL AND COMMUNITY ACTIVITIES

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| 1961-1975 | Active and reserve service as a United States Army Officer (attained rank of Captain, then branch qualified, and offered promotion to the rank of Major, Infantry). |
| 1981 | Discussed heart research on nationally syndicated radio program "Man and Molecules," originating in Washington, D.C. |
| 1990-1997 | Boy Scouts of America Volunteer Leader. Have served as Troop Committee Chairman, Assistant Scoutmaster, Scoutmaster, District Training Committee Chairman, Council Training Chairman (responsible for the training of all Boy and Cub Scout Leaders in the Syracuse and surrounding metropolitan area). |
| | Served on the Executive Board of the Boy Scouts of America, Hiawatha Council, Syracuse, New York. |
| | Served on the National Jamboree Physical Arrangements Staff (1989) in Fort A.P. Hill, Virginia, led 50-100 mile high adventure wilderness treks through the Adirondack Mountains, Sabattis, New York (1990, 1994, 1995) and the Rocky Mountains at Philmont, New Mexico (1991 and 1995). Also, served as an Adult Volunteer Leader at the Boy Scout National Order of the Arrow Conference in Bloomington, Indiana (1990). |
| | Honors as a volunteer scouter include: The Scouters Key (1988), District Award of Merit (1991), Outstanding Troop Committee Chairman Award (from Kiwanis Club) (1991), Woodbadge Training Award (1990). |
| 1992-1997 | Board of Directors, Hiawatha Council, Boy Scouts of America. |
| 1990-present | Third Degree Master Mason. |

TEACHING EXPERIENCE

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| 1966-1967 | General Zoology, 5 cr. Teaching Assistant, Department of Zoology - Arizona State University (two semesters and one summer). |
| 1967-1968 | Anatomy and Physiology, 4 cr. Teaching Assistant, Department of Zoology - Arizona State University (2 semesters). |
| 1971 | Embryology, 4 cr. Guest Faculty, Department of Zoology - Arizona State University. Course director (summer). |
| 1972-1974 | Theory and Methods in Electron Microscopy, 2 cr. Department of Biology - University of Pennsylvania (2 summers). |
| 1974-1975 | Developmental Biology, 3 cr. Department of Biology - University of Pennsylvania. Responsible for 2 weeks teaching of organ culture techniques. |
| 1975-1976 | Medical Histology, 6 cr. Department of Anatomy - University of California, San Francisco. |
| 1976 | Medical Endocrinology, 4 cr. Departments of Anatomy and Biochemistry - University of California, San Francisco. Responsible for teaching histology of endocrine organs. |
| 1976-1977 | Pharmacy Gross Human Anatomy, 4 cr. - University of California, San Francisco. |
| 1977-1980 | Guest lectures in Human Anatomy for nurses (428) and Muscle Biology (725), 3 cr. - University of Wisconsin, Madison. |

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| 1977-1983 | Medical Gross Human Anatomy, 8 cr. Department of Anatomy - University of Wisconsin, Madison. |
| 1983-1997 | Medical Gross Human Anatomy, 9 cr. Department of Anatomy and Cell Biology - State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1984-1987 | Cell Biology, 1 cr. Department of Anatomy and Cell Biology State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1984-1997 | Embryology, 1 cr. Department of Anatomy and Cell Biology State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1988-1991 | Cell and Molecular Biology, 3 cr. Departments of Anatomy and Cell Biology and Biochemistry and Molecular Biology – State University of New York Health Science Center at Syracuse, Syracuse, New York |
| 1988-1991 | Advanced Cell and Molecular Biology, Cell and Molecular Biology Program - State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1992-1996 | Advanced Topics in Embryology and Developmental Biology, Department of Anatomy and Cell Biology - State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1994-1996 | Molecular and Cellular Mechanisms of Development, Department of Anatomy and Cell Biology, State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1994-1996 | Medicine and Society, College of Medicine, State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1996-1997 | Contemporary Cellular, Molecular and Developmental Biology, 3 cr., Department of Anatomy and Cell Biology, State University of New York Health Science Center at Syracuse, Syracuse, New York. |
| 1999-2001 | Molecular Biology of the Cardiovascular System for Graduate Students, College of Medicine, Department of Medical Physiology, The Texas A&M University System Health Science Center, College Station. |
| 2002-present | Occasional lectures in courses in College of Science, Florida Atlantic University. |
| 2002-present | Independent Study course and Undergraduate Honors Thesis Advisor, College of Science, Florida Atlantic University. |

SPONSORSHIP OF STUDENTS, POSTDOCTORAL FELLOWS AND VISITING SCIENTISTS

Undergraduate and Medical Students Trained:

Have had well over 200 students work with me over the years. Currently, the Division of Research at FAU has 6 undergraduate students interning; I have two students doing Honor Theses under my direction, have accepted an M.S. student and three postdoctoral fellows into my laboratory (funded by my 2 NIH R01 Grants and an American Heart Association Grant.

Graduate Students Trained:

- Craig Hill, Ph.D., (1985) received a Postdoctoral Fellowship at the Max Plank Institute in Goettingen, Germany. Currently, Dr. Hill is Director of Research at Hybriteck Inc. in California.
- Rebecca Fuldner, Ph.D., (1985) began work with me in 1977 and completed her Ph.D. degree after I left Wisconsin. She went to the NIH as a Postdoctoral Fellow.
- Sui Mai Wong, Ph.D., (1984) began her work with me in 1979 and completed her Ph.D. degree after I left Wisconsin. She joined the faculty of the National Taiwan University, where she is currently a Professor.
- Dino Messina, M.D., Ph.D., (1986) after completing the M.D /Ph.D. degrees, went to do a Residency in Internal Medicine and Cardiology at the University of Pittsburgh. Currently a physician and lecturer at St. Elizabeth's Hospital in Boston, MA, affiliated with Tufts University.
- Guan-Ren Hou, M.S., (1992) currently Director of Allied Health Services, Harvard University.

- Christine Makhuli, M.S., (1992) currently Director of Public Relations with a pharmaceutical firm.
- Jian Li, M.D., Ph.D., (1992) is currently an Assistant Professor at Harvard University.
- Willie Underwood, M.D., M.S., (1994) currently a resident in Urology at the University of Massachusetts.
- Pei-Shen Shen, M.D., Ph.D., (1994) completed the Ph.D. and went to Harvard School of Public Health for Postdoctoral training. She currently works as a Research Scientist at Harvard.
- Sherrie LaFrance, Ph.D., (1994) completed the Ph.D. degree and went to Harvard Medical School to do her Postdoctoral research study.
- Nihan Erginel-Unaltuna, Ph.D., (1994) completed the Ph.D. degree in May, 1994, and spent five additional months in my laboratory as a Postdoctoral Fellow. She then went to a Postdoctoral Research Fellowship at Bristol-Myers-Squibb Research Center in Princeton, New Jersey. She is currently a Professor and Chairperson at the University of Istanbul, Turkey.
- Eileen Luque, M.D., Ph.D., (1995) completed the Ph.D. in January, 1995, and went to Yale University College of Medicine as a Postdoctoral Research Fellow. Currently a Pediatric Physician at Las Cruces, NM.
- Simone Ward, Ph.D., (1995) Minority Fellowship recipient for her Ph.D. degree training, accepted a Postdoctoral Research Fellowship at Harvard Medical School beginning in 1995 and currently on the research faculty at Harvard.
- Yan Wang, M.S., (1996) currently a Ph.D. student at Columbia University.
- Arun Gaur, Ph.D., (1997) completed the Ph.D. and went to Rutgers University to do Postdoctoral research study. He is currently a senior scientist in the QC department at Imclone Systems in New Jersey.
- Kathleen Pietras, M.S., (1997) completed the M.S. Degree and plans to pursue a Physician's Assistant degree.
- Sharon Luster, M.D., a Minority Fellowship recipient for her Ph.D. training, accepted a medical Residency in Surgery at the University of Minnesota.
- Robert Zajdel, Ph.D., (1998) currently an Assistant Professor at the SUNY HSC at Syracuse.
- Belinda Spinner, Ph.D., (1999) Currently employed by Eli Lilly Company as part of the Diabetes Help Force.
- Chi Zhang, Ph.D., received degree from Texas A&M University and is currently a Research Assistant Professor at Florida Atlantic University.
- Gian Franco Sferrazza, B.S. is currently a graduate student in my laboratory at Florida Atlantic University, working on his Master's Degree.
- Saira Hussain did an undergraduate honor's thesis in my laboratory in Biomedical Science and is now enrolled in medical school.
- PingPing Jia is currently a graduate student in my laboratory, working on his

Postdoctoral Fellows/Visiting Scholars/Research Faculty:

- Parris Kidd, Ph.D., received the Ph.D. at Berkeley University and worked in my laboratory while at the University of California, San Francisco. He studied the histochemistry of heart development and succeeded in winning the Bay Area Heart Association Outstanding Researcher Award while in my laboratory. He also was awarded an American Heart Association Postdoctoral Fellowship.
- Zeng Hong Tu, M.S., M.D., was a Visiting Scholar from China, did Postdoctoral work in my laboratory for three years and studied tissue culture of hamster heart cells. Currently he is a Professor at the Institute of Materia Medica, Shanghai, China.
- Pamela B. Moore, Ph.D., received the Ph.D. from Oklahoma State University, came to work in my laboratory at the University of Wisconsin where she spent three years doing biochemistry on contractile proteins and developing hearts. She is currently on the research faculty at Rockefeller University, New York.
- Soo-siang Lim-Spiker, Ph.D., received the Ph.D. from the University of South Dakota, came to my laboratory at the University of Wisconsin and spent three years working on chick heart development looking at the biochemistry of contractile proteins during development. She is currently Associate Professor (with tenure) at Indiana University Medical Center, Indianapolis.
- M. Nicola Woodroffe, Ph.D., came from the University of London to do postdoctoral training in my laboratory. Her research included studying actin in the axolotl heart and contractile proteins in the chick heart.

- Lynn A. Davis, Ph.D., received her Ph.D. at the University of Virginia. She came to the University of Wisconsin, spent a year doing Postdoctoral work on heart development in the axolotl and then moved with me to SUNY in Syracuse where she continued for an additional two years funded by an NSF Fellowship. She is currently an Associate Dean of Students, University of Virginia, Charlottesville.
- Yuji Isobe, M.D., Ph.D., came from Chiba University in Japan where he received the M.D. and Ph.D. degrees. He spent four years in my laboratory as a Postdoctoral Fellow and Research Associate working on the immunoelectron microscopy of contractile proteins in developing hamster heart cells in culture. He is currently affiliated with the University Hospital in Chiba, Japan.
- Margaret Fransen, Ph.D., began postdoctoral work in my laboratory after receiving her Ph.D. from the University of North Carolina and having done a Postdoctoral Fellowship in our Biochemistry Department. She spent several years as a Postdoctoral Fellow and is currently a Research Assistant Professor in the Department of Anatomy and Cell Biology.
- Hanna Osinska, Ph.D., received her Ph.D. at Warsaw University in Poland in cell biology and biochemistry. She came here and worked for several years as a Postdoctoral Fellow studying heart development in culture using immunohistochemical methods. She was a research associate for several years at the SUNY Health Science Center and has relocated to the University of Cincinnati.
- Sherrie LaFrance, Ph.D., after completing her Ph.D., spent an additional six months here in my laboratory studying the molecular biology of heart development. She went on to Harvard Medical School to do Postdoctoral work.
- Nihan Erginel-Unaltuna, Ph.D., spent five months in my laboratory after completing her Ph.D. and was looking at the molecular biology of a new protein, which she had discovered during her graduate training. She was a Postdoctoral Fellow at Bristol-Myers-Squibb and now is a Professor and Chairperson at the University of Istanbul, Turkey.
- John Armstrong, Ph.D., spent a year in my laboratory as a Visiting Scientist from Canada and studied electron microscopy and biochemistry of heart development in the axolotl and hamster. He is presently a Professor of Zoology, University of Ottawa.
- Yongze Zhu, M.D., a Visiting Scholar from China, is spending three years studying heart cell culture in the axolotl with respect to the appearance of intermediate filament proteins. He is currently Professor and Chair of Anatomy at Yanhtza University, China.
- Abdul Zanabli, M.D., received his M.D. in Syria and spent a year doing Postdoctoral work in my laboratory and learning cell and molecular biology techniques as it relates to heart development. He moved on to an Internal Medicine residency in Chicago.
- Azmi Draw, M.D., also from Syria, worked with me on the molecular biology of contractile proteins and went on to a residency in Michigan.
- Rajula Bhatia, Ph.D., received her Ph.D. from the University of Toledo, Ohio, and studied molecular biology of a unique RNA that rescues and promotes myofibrillogenesis in cardiac mutant axolotl hearts. She is now working as a senior scientist with the Functional Genomics group at Aventis Pharma.
- Anne Rosa McDonald, Ph.D., received her Ph.D. from the University of London, did work as an American Heart Association Postdoctoral fellow in my laboratory and is continuing at the SUNY Health Science Center, Syracuse, New York.
- Robert J. Zajdel, Ph.D., received a Ph.D. at the SUNY Health Science Center in Syracuse. He was an American Heart Association Postdoctoral fellow in my laboratory and is now a Research Assistant Professor at SUNY, Syracuse.
- Dalton Foster, Ph.D., received his Ph.D. from the SUNY Health Science Center in Syracuse and subsequently performed research at the Center for Blood Research at the Harvard Medical School as a Postdoctoral Research Associate. He is currently attending medical school at Upstate Medical University in Syracuse, New York.
- Fanyin Meng, M.D., received his M.D. from China, spent three years as a Postdoctoral Fellow in my laboratory at Texas A&M and is currently on the research faculty of the University of Texas.

- Xupe Huang, M.D.; Ph.D., was a Research Assistant Professor (non-tenure track) working on molecular biology in my laboratory at Texas A&M University. He is presently an Assistant Professor (tenure track) at Florida Atlantic University.
- Qing Li, M.D., was a Postdoctoral Fellow in my laboratory at Texas A&M University. She is currently a Research Scientist in industry in Bethesda, Maryland.
- Chi Zhang, Ph.D., was a Postdoctoral Fellow in my laboratory at Florida Atlantic University and is currently a Research Assistant Professor in the Cellular and Developmental Biology Institute at Florida Atlantic University.
- Fahri Akbas, Ph.D., received his Ph.D. at the University of Istanbul in Turkey and is currently a Postdoctoral Fellow in my laboratory at Florida Atlantic University.

AREA OF RESEARCH INTEREST

My main research interests concern a study of myofibrillogenesis and heart inductive processes in developing embryonic hearts at the cell and molecular levels. Immunofluorescent and electron microscopy, biochemistry, molecular biology and tissue culture methods are used in the studies. We are currently studying cardiac mutant axolotls, transgenic mice and stem cells. Our goals are to elucidate the sequence of events and mechanism(s) of myofibrillogenesis and to explain how inductive interactions direct heart differentiation at the cellular and gene levels. We recently have discovered a unique and specific RNA that has the capacity to promote cardiac myofibrillogenesis in cells. We are pursuing the mechanism of this exciting and intriguing phenomenon. These research programs are funded by two active NIH RO1 grants and an American Heart Association grant.

EXTRAMURAL RESEARCH SUPPORT AWARDS

Previously-funded grants:

Title: Genetic Cardiomyopathies in Salamanders
 Amount Received: \$160,000
 Date: 04/01/76 - 03/30/79
 Role in Obtaining Grant: Principal Investigator
 Name of Granting Agency: NIH

Title: Genetic Cardiomyopathies in Salamanders (Dual application of above grant)
 Amount Received: \$80,000
 Date: 04/01/76 - 07/01/78
 Role in Obtaining Grant: Principal Investigator
 Name of Granting Agency: NSF

Title: Myogenesis in Cardiomyopathic Salamanders and Hamsters
 Amount Received: \$49,500
 Date: 07/01/76 - 06/30/79
 Role in Obtaining Grant: Principal Investigator
 Name of Granting Agency: American Heart Association

Title: Congenital Cardiomyopathies in Vertebrates
 Amount Received: \$10,500
 Date: 01/01/80 - 12/31/80
 Role in Obtaining Grant: Principal Investigator
 Name of Granting Agency: American Heart Association

Title: Genetic Cardiomyopathies in Vertebrates
 Amount Received: \$186,000
 Date: 04/01/79 - 03/31/82

Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: NIH

Title: Established Investigatorship Award
Amount Received: 75% of salary for P.I. for five years
Date: 07/01/76 - 06/30/81
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Myogenesis in Cardiac Non-Function Axolotls and Cardiomyopathic Hamsters
Amount Received: \$40,000
Date: 07/01/80 - 06/30/82
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: National Foundation March of Dimes

Title: Heart Development in Cardiac Mutant Salamanders
Amount Received: \$12,000
Date: 01/01/81 - 12/31/81
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Heart Development in Cardiac Mutant Salamanders
Amount Received: \$10,000
Date: 01/01/82 - 12/31/82
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Immunofluorescent Studies of Myofibrillogenesis
Amount Received: \$25,000
Date: 01/30/84 - 02/01/85
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: Hendricks Foundation

Title: Heart Development in Cardiomyopathic Hamsters
Amount Received: \$99,000
Date: 01/01/82 - 06/30/85
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Heart Induction in Axolotls
Amount Received: \$40,000
Date: 10/01/83 - 09/30/85
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: Muscular Dystrophy Association

Title: Cardiac Myofibrillogenesis and Heart Induction
Amount Received: \$118,948
Date: 01/01/86 - 12/30/86
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Myofibrillogenesis and Immunoelectron Microscopy

Amount Received: \$25,000
Date: 07/01/86 - 06/30/87
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Genetic Cardiomyopathies in Vertebrates
Amount Received: \$534,924
Date: 04/01/83 - 03/31/88
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: NIH

Title: Reichert-Jung Cryofract 190 with Cryoblock (DRR-BRS Shared Instrumentation Grant)
Amount Received: \$124,000
Date: 12/01/87 - 11/30/88
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: NIH

Title: Molecular Mechanisms of Heart Induction and Myofibrillogenesis
Amount Received: \$90,000
Date: 07/01/88 - 06/30/91
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Research Equipment Grant
Amount Received: \$130,000
Date: 01/01/91 - 12/31/91
Role in Obtaining Grant: Internal University Application
Name of Granting Agency: New York State University Equipment Fund for Laser Confocal Scanning Microscope

Title: Intercellular Communication and Impulse Propagation
Amount Received: \$803,400
Date: 12/01/89 - 11/30/94
Role in Obtaining Grant: Core-Leader (Dr. Jose Jalife, PI)
Name of Granting Agency: NIH

Title: Molecular Biology of Heart Induction in Mutant Axolotls
Amount Received: \$90,000
Date: 07/01/92 - 06/30/95
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association

Title: Medical Student Research Fellowship Program
Amount Received: \$171,000
Date: 7/1/86 - 6/30/96
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: American Heart Association (National)

Title: Intercellular Communication and Impulse Propagation (Continuation of above PPG)
Amount Received: \$850,000
Date: 12/01/94 - 11/30/99
Role in Obtaining Grant: Consultant (Dr. Jose Jalife, PI)

Name of Granting Agency: NIH

Title: Cellular and Molecular Mechanisms of Heart Development

Amount Received: \$529,858

Date: 08/01/93 - 07/31/98

Role in Obtaining Grant: Principal Investigator

Name of Granting Agency: NIH

Title: Investigation of a Novel Protein Associated with Heart Development

Amount Received: \$70,000

Date: 07/01/97-06/30/99

Role in Obtaining Grant: Postdoctoral Fellowship Sponsor (for Anne R. McDonald)

Name of Granting Agency: American Heart Association

Title: Characterization of a Novel RNA that Promotes Myofibrillogenesis

Amount Received: \$60,000

Date: 07/01/96-06/30/98

Role in Obtaining Grant: Postdoctoral Fellowship Sponsor (for Dr. Rajula Bhatia)

Name of Granting Agency: American Heart Association

Title: Cellular and Molecular Mechanisms of Heart Development

Amount Received: \$90,000

Date: 07/01/96 - 06/30/99

Role in Obtaining Grant: Principal Investigator

Name of Granting Agency: American Heart Association

Title: Rescue of Cardiac Mutant Axolotl Hearts by Ectopic Expression of a Novel RNA and Tropomyosin

Amount Received: \$70,000

Date: 07/01/97-06/30/99

Role in Obtaining Grant: Postdoctoral Fellowship Sponsor (for Robert Zajdel)

Name of Granting Agency: American Heart Association

Title: Studies on a Novel RNA that Promotes Heart Development

Amount: \$1,591,950 (Total Costs)

Date: 01/01/98-12/30/02

Role in Obtaining Grant: Principal Investigator

Name of Granting Agency: NIH

Currently-Funded Grants:

Title: A Novel Protein Associated with Heart Development

Amount: \$1,206,642 (Total Costs)

Date: 07/01/97 - 06/30/05

Role in Obtaining Grant: Principal Investigator

Name of Granting Agency: NIH

Title: Studies on a Novel RNA that Promotes Heart Development

Amount: \$1,500,000 (Total costs)

Date: 04/01/03-03/31/07

Role in Obtaining Grant: Principal Investigator

Name of Granting Agency: NIH

Title: Vertebrate Heart Specification and Myofibrillogenesis During Early Embryogenesis
Amount: \$120,000
Date: 07/01/02-06/30/05
Role in Obtaining Grant: Principal Investigator
Name of Granting Agency: Christine B. Lynn American Heart Association Grant-in-Aid

Title: Center of Excellence on Medical and Marine Biotechnology
Amount: \$10,000,000
Date: 07/01/03-01/30/05
Role in Obtaining Grant: Principal Offeror (Principal Investigator)
Name of Granting Agency: State of Florida

PATENTS

2004 Promoting Cardiac Cell Differentiation (US Provisional 60/462 171)—with Dr. Chi Zhang

INVITED SYMPOSIA LECTURES/CONFERENCES/KEYNOTE SPEECHES

- 1974** Second International Symposium of the Muscular Dystrophy Association on Exploratory Concepts in Muscular Dystrophy.
(Invited speaker and invited paper). Carefree, AZ.
- 1975** International Symposium on The Biochemistry of Smooth Muscle. (Invited paper with A.V. Somlyo, F. Ashton, J. Vallieres and A.P. Somlyo). Montreal, Canada.
- 1976** ICN-UCLA Winter Conference on Molecular and Cellular Biology (Invited paper for Symposium Volume).
- 1977** International Symposium on Developmental Genetics. (Invited speaker and invited paper). Toronto, Canada.
- 1977** March of Dimes International Symposium on Birth Defects. (Invited speaker and invited paper). Grand Canyon, AZ.
- 1978** Established Investigators Meeting of the American Heart Association (Invited speaker). Charleston, SC.
- 1978** American Heart Association-National Organization Annual Meeting (Invited speaker). Dallas, TX.
- 1980** Annual Symposium of the New York Society for Electron Microscopy (Invited speaker). New York, NY.
- 1981** Electron Microscopy Society of America. (Invited symposium chairman and speaker). Atlanta, GA.
- 1982** VII International Conference: Defined Immunofluorescence, Immunoenzyme Studies and Related Labeling Techniques (Invited speaker). Niagara Falls, NY.
- 1983** First International Symposium on Contractile Proteins in Muscle and Non-Muscle Cell Systems (Invited speaker and invited papers). Sassari, Italy.
- 1984** NIH Workshop on Molecular Biology and the Cardiovascular System (Invited participant). Chantilly, VA.
- 1984** Tenth Yamada Conference on Cell Motility II (Invited presentation). Nagoya, Japan.
- 1985** Third International Congress on Cell Biology (Participant). Tokyo, Japan.
- 1985** XII International Anatomical Congress, London, England.
- 1986** Annual Symposium of Scanning Electron Microscopy, Inc. (Invited Presentation and Paper). Hamilton, Ontario, Canada.
- 1987** Biology of Isolated Adult Cardiac Myocytes. (Invited Presentation and Paper). Asilomar, California.
- 1988** ICN-UCLA Winter Conference on Molecular and Cellular Biology of Muscle Development. Steamboat Springs, Colorado (Invited Presentation and Paper).
- 1988** VIII International Symposium on Morphological Sciences. Rome, Italy (Invited Presentation and Paper).

- 1990 New York Academy of Science, Congress on Embryonic Origins of Defective Heart Development (Presentation and Paper).
- 1991 Keystone Symposium on Molecular Mechanisms of Cardiac Growth and Hypertrophy, Keystone, Colorado.
- 1992 Conference on Molecular Biology of Development, Arlie, Virginia (Presentation).
- 1992 Fifth International Congress on Cell Biology, Madrid, Spain. (Invited Presentation).
- 1993 International Workshop on the Molecular Biology of Urodeles, Indianapolis, Indiana.
- 1994 (Invited Presentation and Symposium "Provocateur").
- 1994 Syracuse Microscopy Colloquium, Syracuse, New York (Invited Symposium Speaker).
- 1994 Cardiac Morphogenesis Conference, Charleston, South Carolina (Invited Presentation).
- 1994 Midwestern Society for Electron Microscopy, University of Iowa, Iowa City, Iowa (Invited Symposium Speaker).
- 1995 Symposium on the Molecular Biology of Cardiac Development, San Francisco, California (Invited Symposium Speaker).
- 1995 American Heart Association, Conference on Cellular and Molecular aspects of Development, New Orleans.
- 1996 Weinstein Cardiovascular Development Conference, Philadelphia, Pennsylvania.
- 1997 NIH Cardiovascular Development Conference, Philadelphia, Pennsylvania (Invited Speaker).
- 1997 Federation of the American Society for Experimental Biology and Medicine (FASEB), New Orleans, Louisiana (Invited Minisymposium Chairman and Speaker).
- 1997 Cardiovascular Development Symposium, St. Petersburg, Russia (Invited Symposium Speaker and Invited Review Manuscript)
- 1998 Microscopy Society of America, Chicago, Illinois (Invited Symposium Speaker and two Invited Review Manuscripts).
- 2000 Baylor College of Dentistry "Student Research Day", "An Overview of Research at Texas A&M and the Future of Biomedical Research in Universities" (Keynote Speaker).
- 2000 Intercultural Development Across the Border II: A Research and Cultural Exchange Between the U.S. and Mexico, Vera Cruz and Xalapa, Mexico (Invited Speaker).
- 2000 Texas A&M University System Health Science Center Faculty Research Retreat, "Bioscience Research at Texas A&M" (Invited Speaker).
- 2000 6th Annual Meeting of the International Society for Heart Research, Chinese Section (ISHR), Nanjing, China (Invited Keynote Speaker).
- 2001 Myofibrillogenesis Symposium, Special Interest Group, American Society for Cell Biology Meeting, Washington, D.C., (Invited Speaker).
- 2003 Overview of Research at Florida Atlantic University, College of Engineering, Tokushima University, Japan (Invited Speaker)
- 2003 Research Symposium on Medical Bioscience, Tokushima, Japan (Invited Symposium Speaker)
- 2005 XVIII World Congress of the International Society for Heart Research (ISHR), Brisbane, Australia (Symposium Chair and speaker)

INVITED RESEARCH SEMINAR SPEAKER (Partial List)

Cell Biology Institute, Arizona State University
 Cardiovascular Research Unit, University of Pennsylvania
 Muscle Biology Institute University of Pennsylvania
 Biochemical Laboratories, University of Pennsylvania
 Department of Anatomy, University of Pennsylvania
 Department of Anatomy, University of California, San Francisco
 Department of Zoology, Louisiana State University
 Department of Zoology, University of California, Berkeley
 Department of Zoology, University of Alabama
 Division of Medical and Biological Sciences, Brown University

Department of Anatomy and Physiology, Indiana University
 Pennsylvania Muscle Biology Institute, University of Pennsylvania
 Division of Cellular Biology, San Francisco Veterans Administration Medical Center
 National Heart and Lung Institute, National Institutes of Health
 Department of Anatomy, Columbia University
 Department of Anatomy, Southern Illinois University
 Department of Anatomy, University of Arizona
 Department of Anatomy, Temple University
 Department of Anatomy, University of Wisconsin, Madison
 Electron Microscopy Group, University of California, Berkeley
 Department of Anatomy and Physiology, University of California, Berkeley
 Department of Biology, California State University, San Diego
 Department of Muscle Biology, University of Wisconsin, Madison
 Department of Anatomy, Duke University
 Department of Anatomy, Medical College of South Carolina
 Department of Biology, University of Virginia
 Department of Zoology, Developmental Biology Group, University of Wisconsin,
 Madison
 Department of Anatomy, University of Miami
 Department of Anatomy, University of North Carolina
 Division of Biological Sciences, Oakland University
 Department of Anatomy, Medical College of Wisconsin, Milwaukee
 Department of Pharmacology, University of Wisconsin
 Department of Anatomy, Texas Tech University
 Department of Anatomy, Upstate Medical Center
 Department of Pathology, University of Wisconsin
 Department of Anatomy, University of Texas Medical Branch, Galveston
 Department of Biology, Utica College, New York
 Department of Anatomy and Cell Biology, State University of New York
 Health Science Center at Brooklyn
 Heart, Lung and Blood Institute, National Institutes of Health, Bethesda, Maryland
 College of Graduate Studies, University of Alabama, Birmingham
 Department of Biology, Indiana University, Bloomington
 Department of Medical Sciences, Indiana University/Notre Dame, South Bend, Indiana
 Department of Anatomy, University of Iowa, Iowa City
 Department of Anatomy, University of Florida, Gainesville
 Department of Anatomy and Cell Biology, Uniformed Services Health Sciences University, Bethesda,
 Maryland
 Department of Physiology, SUNY Health Science Center, Syracuse, New York
 College of Medicine, University of Missouri, Columbia, Missouri
 Department of Physiology and Biophysics, State University of New York,
 Buffalo, New York
 Department of Medical Physiology, Texas A&M University, College Station, Texas
 Department of Pharmacology and Toxicology, Texas A&M University, College Station, Texas
 Nanjing Medical University, Nanjing, China
 Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Shanghai, China
 Miscellaneous Speeches

PUBLICATIONS AND PRESENTATIONS

1. Lemanski, L.F., J.L. Beggs and E.M. Bertke 1970 Microtubules and microfilaments in the glomeruli of canine renal allografts. Proc. Electron Microscopy Soc. Amer., pp. 60-61.

2. Lemanski, L.F. and E.M. Bertke 1970 Histology and ultrastructure of untreated forty-eight hour canine renal transplants. *J. Exp. Zool.*, 174: 287-308.
3. Lemanski, L.F., E.M. Bertke and J.T. Justus 1970 The ultrastructure of myocardial cells in normal and cardiac lethal mutant Mexican axolotls, *Ambystoma mexicanum*. *Proc. Electron Microscopy Soc. Amer.*, pp. 62-63.
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